



CALIFORNIA GARDEN

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JUNE, 1930

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STREET TREES

By P. D. Barnhart

One of the problems for solution by municipalities as well as individuals of Southern California is: What kind of tree is best adapted to street planting? First, as to size when fully developed. Second, drought resistant. Third, their liability to break up sidewalks, and burst out curbing. One thing is certain, until the present haphazard system of planting, by every lot owner to suit his or her whims, is abolished, and the task assigned to a competent forester, the problem never will be solved from a utilitarian, and aesthetic point of view. In the opinion of this writer, a single species of tree should be planted on an avenue no matter how long it may be. A short lateral street adjoining should have the same sort of tree as the long one, that the entire planting may be a harmonious whole. Let us look for a moment at some of the incongruities of the present system as they appear in every town, city or hamlet of this Southland. The proverbial "Joseph's Coat" will be a poor second in the race for diversity of the planting schemes. No use to waste time and space enumerating them. A stroll, by any careful, thoughtful observer through any municipality will convince the most skeptical of the truth of the above statement. And now for a thought of varieties best suited to our arid climate with its many days of brilliant sunshine during the year. But before we go farther into this subject it will be well to refer to the width of the parkings between the curb and the sidewalks of the majority of our streets and avenues. Four feet, five feet, and in some cases only three, is the space allowed for planting trees. Anybody who knows anything about a tree well knows that even a five-foot space is all too small for most trees to develop into fine specimens. And now let us discuss a few trees which this writer considers worthy a place in the scheme of street tree planting. Our native Coastal oak (*quercus agrifolia*) is pre-eminent among all the trees with which we are acquainted for this purpose. When once established, it will thrive on a minimum amount of water. Indeed, it will not tolerate an excessive amount of irrigation. If so treated, the new growth is afflicted with mildew, and the tree shows distress by small anaemic foliage. There are a few groves of this noble tree on private

estates of this Southland, which have been interplanted with ferns, bamboos, and other trees and plants which require an abundance of water for their development, and the doom of those oaks is sealed. Ere long they will die; be converted into fuel and consigned to the fireplace of palatial homes. And what a pity to thus destroy a tree which has taken a century or more to bring to perfection.

The golden cup oak (*quercus chrysolepis*) of which Jepson says: "It has a wider distribution, and grows under more varied conditions than any species of this family in California." Moreover, it is said to be the most beautiful of the tribe. Payne has a stock of the trees, and it shall be given a chance to show what it will do in the botanic garden of Mrs. Wernigk.

Arbutus menziesii, the most beautiful tree that God ever made, a native of this coast; an evergreen too, should be included in the list of street trees where water is abundant. It sheds its bark annually, and the new coat is like unto a beautiful garment of mahogany color, smooth as though polished. The foliage is large, the blossoms a beautiful white, followed by brilliant red berries. Truly a magnificent tree. The common name for this subject is Madrone. Brethren in the Fraternity of Gardeners, let us venture out into the realms of unexplored territory of street tree planting. We have dropped into a rut of incongruities, bordered with such things as soft maples, maple, or silver maple (*acer saccharinum*) lombardy poplar, birch and such things as belong to humid climates. May the good Lord deliver us, and that right soon, from the affliction of such planting. There is one long avenue in Beverly Hills planted to the above named maple, which is distressing to see the agony those trees must endure.

Now, then, for some of the exotics which are desirable for our street tree planting. First, for the narrow parkways. *Sterculia diversifolia*, whose roots go straight down into the soil instead of spreading out under the sidewalk, ripping it up. A native of Australia, it fits into our arid climate. It is the only subject suitable for a three-foot space.

For a five-foot space the *eucalyptus ficifolia* will fill the bill. Wondrously beautiful when in flower, always neat in appearance, we need

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not crave the beautiful royal poinciana, so much admired by tourists to Florida. Of about the same habit of growth, but of an entirely different family is *Lagunaria Patersoni*; evergreen, the flowers shell pink borne abundantly. There is one feature of this tree which mars its beauty, the seed vessels remain, and disfigure its appearance. Of the Pittosporums there are three of outstanding beauty: *Rhombifolium*, with its beautiful berries; *Umbellatum*, because of its delightfully perfumed flowers; *Phillyraeoides*, on account of its pendulous branches. In this respect it is superior to the Weeping Willow (*Salix Babylonica*) which is a short lived tree anyway, no matter where planted in this country. I have often wondered whether the Hebrew poet meant this tree when he said: "By the rivers of Babylon, there we sat down, yea, we wept, when we remembered Zion," since the books tell us that this tree is a native of China.

Phillyraeoides is charming in appearance. When given a chance to show its beauty, there is room for development, the pendant branches swathe the body in graceful outline. It sends out some suckers which transplant readily. Its ultimate height is as yet unknown; Bailey says up to 20 feet, which is high enough to escape the tree butchers who work for telephone and other electrical utility companies. Some day there won't be any of such disfigurements in our cities. Verdes, near Redondo, is setting an example of what may be done in the way of putting all wiring under ground. But this is a digression; lets get back to the trees. Another exotic of merit is St. John's Bread (*Ceratonia Siliqua*). This subject being diecious—that is, pistillate flowers on one tree, staminate on another, they do not all bear fruit unless grafted. The Armstrong Nurseries of Ontario have given us two or three varieties which bear abundantly; the sugar content 35 per cent. The tree is evergreen, will stand as much drouth as a Pepper tree, and that is saying a lot. The pods when pulverized produce a nutritious meal which, when fed to stock of all sorts that are grown for food, impart a delicious flavor to the meat unexcelled by any other ration.

To the thrifty housewife who has a supply of these beans, if she will run them through a meat chopper, pour boiling water on meal, and let remain over night, she will have a delicious syrup for the "hot cakes" at the breakfast. Reader! If Armstrong charges you a dollar or two for one of his grafted trees, pay the price cheerfully, and be thankful for the favor. Whether boys, yes, and girls, too, could resist the impulse to wreck the trees in an attempt to get the delicious beans, were an avenue planted with bearing

trees, is beyond the imagination of this writer. Anyway, seedling, barren trees are cheap, and avenues planted with them would be a thing of beauty and a joy for a century at least, and that is about a half century longer than Californians will permit a tree to live.

Jacarand, *Grevillia Robusta*, *Calodendrum Capensis*, are all desirable for street tree planting. The aforementioned trees are Endogens. The list is by no means exhausted for Southern California planting, but enough has been given to stimulate thought on the subject, and the hope of the writer is that the day will come when cities will be really beautiful because of their trees. This article will not be complete unless Palms are mentioned. *Cocos plumosa*, an incorrect name for the stately Palm, which should be much more extensively used than is the case at present. *Phoenix Canariensis*, the most majestic of the tribe, is suitable only for large space, and never should be used for street planting.

NOTES ON NATIVES

By Mrs. Howard W. Johnson

LIBOCEDRUS decurrens. (Libas, drop or tear, and Cedras; alluding to the resinous character of the trees).

This is one of our native trees that is not found as often in local plantings as it should be. A handsome evergreen tree, known to many as the Incense Cedar, it is found in the higher levels of our back country, especially in the vicinity of Cuayamaca, Julian and on Palomar mountain, and wherever seen arouses genuine admiration.

Not everyone knows, however, that it thrives fully as well when brought to the coast level, and is quite as beautiful under cultivation in our home gardens as in its native habitat. In height it reaches about 100 feet, and has been known to grow to 200 feet. But while few of us will feel any certainty that we might live to see it really grow up, we may plant it with every assurance that it will be a thing of beauty from the first hour we give it a place in the home grounds. The branches are spreading, short, flattened, and a bright green that is most pleasing, while the rough bark is a cinnamon red.

It is particularly valuable for use in civic plantings, and many fine specimens flourish in Balboa park. It is to be hoped that the public may be brought to a realization of the real worth of this fine subject, and that it may come to replace a great many less valuable and shorter lived trees.

It thrives best in a well drained soil and likes a rather open situation.

PARKS AS I KNOW THEM

By C. I. Jerabek

Alameda Park in the heart of Santa Barbara covers two square blocks. It is planted with a great variety of trees, palms and shrubs with a ground cover of grass and English ivy (*Hedera helix*) around the edges. A few of the most interesting plants we do not have here in San Diego are *Agonis flexuosa*, a very graceful tree like a weeping willow, the flowers resembling *Leptospermum laevigatum*; *Arbutus Menziesii* (*Madrona*), a fine upright tree with evergreen glossy foliage, manazanita like blossoms followed by scarlet fruit about the size of a pea; *Quercus glandulifera*, very handsome foliage, light green above, whitish beneath; *Conea speciosa*, a shrub with small leaves and flowers, very good for sandy soils; *Vitex Negundo*, var. *incisa*, leaves incisely serrated with panicles of lavender flowers, a very handsome shrub; *Alpinia nutans*, with its canna like leaves and large drooping bunches of shell-like flowers.

In this park is the largest *Dracaena Diracina* I have ever seen. It was originally planted by Mr. Jos. Sexton in the Arlington Hotel grounds but after this hotel burned the trees and shrubs were badly neglected so a public spirited resident gave the money to move this fine tree to Alameda park, the cost being about two thousand dollars.

Just below the Normal School and Encanto Hotel in Santa Barbara is another fine park called "Hillside;" here are two strips of hillside land, one on each side of Padre Serra road, which were originally planted to ordinary trees and shrubs, but these are replaced gradually with new and rare specimens. For a small area it contains more of interest than any place I have ever had the good fortune to come across. Here are a few that I think worthy of mention, but more of them might prove just as interesting.

Acacia platyptera with its flat ribbon-like leaves, globular yellow flowers; *A. Scoripoides* with small compound leaves and small thorns, native of Egypt; *A. suaveolens*, narrow leaves; *A. dentifera*, similar to *Cultiformis* except leaves smaller and dull green; *A. prominens*, having very small leaves, resembling *heptospermum laevigatum*; *A. elongata*, needle-like foliage; and *A. Jonesii*, small compound leaves, bronze color.

There are several kinds of *Hakeas*: *H. cristata* and *H. Glabella*, dentate leaves with thorns on the edges; *H. ruscifolia*, small entire leaves; *H. infurca*, needle-like leaves. There are several varieties of *Banksia*, including *B. grandis*, *B. nutans*, *B. media*, *B. verticillata*, *B. occidentalis*; *B. quercifolia* and *B. spaeocarpa*; *Rhorissus erythraeas* is

a very attractive vine, leaves divided in threes; *Regelia cilata*, the flowers are like *Melaleuca nesophila* and a fragrance to the foliage like Rosemary; *Solanum quitanense*, large green and purple rough leaves; *Ficiis vogeliae*; the veins and edges of the leaves being yellow; *Thryallis brasiliensis*, very pretty small yellow flowers with reddish stems, very useful as a hedge plant; *Bocconia fruitscens*, large gray colored lobed leaves and panicles of flowers often a foot long.

In another part of the park as a magnificent shrub with immense round glossy green leaves, *Werchleria insignis*; *Dombeya layenxii*, a hybrid of *D. Wallichii* and *D. Mastersii*; *Bauhinia Galpinii*, a mass of red flowers, the finest variety of *bauhinia* I have ever seen. *Dodonaea tiguetra*, flowers very insignificant, fruit about the size of a walnut.

Looking very much like a Spanish broom is *Psoralea aphylla*, flowers purple instead of yellow, a very beautiful shrub; *Hibiscus tiliaceus*, large green leaves about ten inches in diameter, big bronze colored flowers; *Cotoneaster Parngi*, leaves very much larger than any other variety, red colored berries; *Virgilia capensis*, one of the handsomest flowering trees, deeply cut pinnate leaves, gray-green and tomentose, with panicles of light lavender pea-shaped flowers; *Koelreuteria paniculata* (*Varnish Tree*), fern-like leaves, flowers in great terminal clusters small and yellowish in colors, followed by bladdery fruit-pods borne in panicles, which are first red and then change to a yellowish brown; *Angophora landceolata* differing from the *Eucalyptus* in having petals and sepals instead of an operculum; *Typidanthus calyptatus*, is very attractive with large leathery digitately compound leaves, one of this variety is back of the Art Gallery in the Huntington Gardens, San Marino; another tree with digitate leaves is *Pseudopanax lessonii*.

Another very attractive shrub is *Oreopanax nymphaeifolia* with very glossy foliage; *Solanum crantonaeifolium* has large clusters of lavender flowers followed by yellow berries; *Sutherlandia frutescens*, with gray foliage and bladder-like seed pods (Mrs. Froth of Bird Rock has a bush of this same variety); *Eryngium serra*, the leaves of this plant always remind me of a giant centipede; it is a bog plant, leaves growing in a clump with flower stalks about four feet; *Jacquemontia coerulea*, a ground cover with small deep blue morning glory-like flowers.

Grevillea ornithopoda, *Viburnum rhytidophyllum*, *Dyandra floribunda*, *Crotalaria agatifolia*, *C. capensis*, *Helianthemum ocyoides*, *Ochna multiflora* and *Cocculus laurifolia*; of the last eight named Miss K. C. Sessions has a small one of each at her place on Soledad Terrace so I haven't described them.

GARDENS OF MEXICO

Those inclined toward Spanish effects in their homes and gardens were given an opportunity at the May meeting of the Floral Association to check up on the accuracy of their architectural and landscape designs. It has been noticeable in the last few years that the Spanish type of garden planning has been quite the rage. We believe that this vogue is well merited and in keeping with the best traditions and atmosphere of the southwest, but whether it is essential or even desirable to duplicate in minute detail Spanish or Mexican gardens is a moot question. Mexican homes and gardens, contrary to popular belief, have not been wholly copied from Japan. In fact, floriculture flourished vigorously in the heyday of the Anahuac confederacy of Indian nations under "Montezuma the Magnificent." Flowers were used lavishly in the ancient Aztec religious ceremonies, while the palace grounds of the Anahuac nobles were resplendent with water pools, flowers, fruit trees and ornamental trees and shrubs, when Cortez first entered the Valley of Mexico. That this is not inconsistent with the modern Mexico is clearly shown by a camera visit to their secluded patio gardens. Who is there who has not seen in the Mexican quarter in San Diego their modest homes, nay shacks, abounding with innumerable potted plants and dooryard flower gardens. The average Mexican has little Spanish blood in his veins; he is mostly Indian, and it is as much to this influence as the Spanish influence that their love of plants may be traced, in our opinion. At any rate, it seems probable that the modern Mexican garden would be the natural fusion of the garden thought of both Spaniard and Mexican Indian.

True, most of the gardens seen in this picture were typically Spanish, with their elaborately designed water fountains of tile invariably in evidence. As we swept one of these secluded patio gardens with an analyzing glance, our imaginative mind disclosed a dark-eyed Spanish Senorita flashing a coquettish smile through the grilled casement at her dashing Don in the garden below, who sits in the mellow moonlight flooding the garden, and strumms softly on his guitar all the while humming endless love tunes to the lady of his heart's desire. Shimmering paths of gold reveal a garden pool. Palm leaves rustle restlessly in the gentle breeze and cast fantastic shadows dancing on the vine-clad walls and all around is heard the quiet pulse of his heart's desire. Shimmering paths of gold reveal a garden pool. Palm leaves rustle restlessly in the gentle breeze and cast fantastic shadows dancing on the vine-clad walls and all around is heard the quiet pulse of life, or nature, of Eden recreated. What memories these gardens hold; what romance unrevealed. We awake from our reverie with a start as the scene changes on the screen and we realize that though we transport this garden bodily to San Diego still we must build our own garden of memo-

ries and the style of garden need not be confined to any specific type

It seems to the writer that we in San Diego might gain most by using the features of Mexican and Spanish influence most consistent with our own ideas of what a garden should be. Then we shall know the pride of creating a Southern California style combining the features of Spanish and Mexican influence best suited to our gardens but still retaining some vestige of originality.

For after all, the nights in San Diego are often too chilly to sit in the moonlight strumming on Spanish guitars, and these so-called Spanish garden seats of cement are as hard as a conquistador's heart.

REPORT OF THE MAY GARDEN MEETING

By K. O. Sessions

The garden meeting of the San Diego Floral Association for May was held at Mrs. W. S. Dorland's on Brant Street, April 29th. The visit proved to be very interesting and profitable although the attendance was not as large as usual. Mrs. Dorland was ill with a cold and Mrs. Carl Dorland served as hostess. The large garden proved to be very individual and interesting.

On the front terrace and lawn was a collection of Junipers both erect and prostrate growers.

The inspection led along the east cliff of the garden, below the level where rock walled pockets held up purple Bougainvillea and Italian Cypress and below Fan Palms and some shrubs were in thrifty growth on the steep hillsides. The pathway beneath old Acacia trees along the south side overlooked a banking of ferns and young palms in variety, beneath the shade of old trees. The east hillside, leading to the south was planted generously with Cacti, Agaves, Aloes and Yuccas, a very promising development and well adapted to the dry and rocky slopes. The pathway leading to the extreme rocky point and then up to the other cultivated garden on the level above where more Cacti and Succulents in a low broad border a year old were fine and well developed specimens in bloom and certainly proved how attractive such mixed plantings become. The most striking specimen was an old and a large Agave Ferox—a perfect specimen—and not to be duplicated in size in this county I'm sure.

Mrs. Dorland has secured a collection of large Palms and has placed them on the southwest slope of the garden, in very attractive positions. The grouping of palms in a large garden is a fine feature that San Diegans must realize and grow up to and this group is an example well worthy of consideration.

The use of *Ficus minima* about the base of the front porch and on steps is the best example of its kind in San Diego. Frequent and close trimming is the secret of its success together with its small leaf form.

The June and July Gardens

By Walter Birch

Driving round Kensington Park and Kensington Heights a few days ago, I was particularly attracted by some beautiful specimens of Gladioli in full bloom. Their rich and varied coloring was wonderful, and while the blooming period of gladioli is not long, one can plant the bulbs successfully for at least seven or eight months of the year, and in that way have a succession of blooms for almost any length of time required, if your soil is good and location warm and protected. Like many other attractive flowers you do not necessarily have to have expensive novelties in order to have good blooms, because many of the older glads in common with dahlias, roses and other plants and bulbs, are as good as anything produced today. So if you are attracted by these beautiful flowers, try another planting at this time.

June is a good planting month for Chrysanthemums, and there are many fine ones to be had locally this year. Don't forget to pinch back heavily after your plants have been in the ground about one month, and then with the large flowering types disbud profusely, according to your idea of the number of flowers you want to grow to each plant. The ordinary run of garden mums grown for garden effect and cutting for the house, do not need so much disbudding and the buttons and pompon types take care of themselves. When once well established in the grounds, mums require lots of water and fertilizer.

It is hard to imagine that it is almost time again to be sowing seeds for next year's blooming. This is easiest done in flats using soil that approximates a mixture of one-third good garden soil, one-third leaf mold and one-third sand. Plant seeds of stocks for winter blooming, the Bismarck or Early Giant Imperial is the best and largest flowered type for general use. Set out plants of Dahlia Flowered and Giant Mammoth Zinnias, as the weather gets warmer they will make better growth. They need rich soil and plenty of water and sunshine. Try a planting also of the smaller dwarf variety, the Liliput type, like little pompon dahlias, they come in pretty shades of salmon, red, bronze, etc., and are profuse bloomers.

If you want a fair showing of flowers next spring from bearded Iris, June and July are good planting months for setting out the rhizomes, as root growth is the best after the blooming period is over. However, the plant-

ing season extends until well into the fall, and with care Iris can be planted any month of the year, but of course if the rhizomes are not planted a few months before blooming time, you cannot expect a great many flowers the first year.

The Bearded Iris is much the best type for culture in Southern California, and is very easy to grow. No particular kind of soil is required and very little fertilizing is necessary, bone meal being one of the safest things to use. If manure is given it should be well rotted and dug into the soil a month or two before planting, and as the rhizomes are only planted two or three inches below the surface, the fertilizer is well below the roots. A little lime is beneficial in most soils.

Iris should be planted in full sun, they will not bloom in the shade. They are particularly at home planted in a dry border or bank. If planted in June or July, the ground should be kept moist enough to promote good root growth, but that does not mean that the ground is to be kept wet.

Usually Bearded Iris are more satisfactory when planted in groups or clumps than when used as edgings for paths, and by sowing such annuals as Linaria, around them in the fall the effect is very pretty indeed when the Iris is making strong leaf growth in the Spring, the dainty Linaria adding color and taking away from the stiffness of the Iris foliage.

WATER LILIES

One of the recent new ones is the Sunrise. It is the heaviest grower of all hardy lilies—the leaves a clear green without spots, and the bloom is sulphur color of 12-inch diameter.

A new Tropical just introduced this year is the Amethyst. It is a seedling of Panama Pacific but larger flowers of amethyst blue surrounded by 4 pink sepals.

Young plants and flowers grow on the leaves much quicker than any other leaf propagator.

—Mrs. W. S. Thomas.

One of the new Watsonias has formed bulbets along the flower stem. The first time I ever saw this. An old florist tells me it is a freak. Any one who knows more of this, please speak.

—Mrs. W. S. Thomas.

The California Garden

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EDITORIAL FLOWER SHOWS

Our spring flower show so impressed one of our exhibitors and visitors from Carmel, California, that she forwarded the following remarks to our president and show chairman, Mrs. Mary A. Greer. Mrs. Greer states that these impressions so nearly express her ideal of how a flower show should impress visitors, that it is extremely gratifying to her to know that her ambition was so well accomplished. The remarks follow:

To successfully fulfill its mission, a flower show should be both beautiful and educational. The keen spirit of flower growing should predominate and the commercial element, if any, be held in abeyance. Side shows and all such pointless adjuncts lending distraction, should be banned. Excellence of flower production as well as good taste should be aimed at. Discrimination and good judgment be expressed.

The San Diego Spring Flower Show measured up to all of these requisites and more. To be sure, the association had the

advantage of a spacious high roof, giving the needed airiness so seldom found. But these benefits alone do not make a good flower show. There were chairs into which the weary could sink in peace and comfort and absorb in leisure the detailed and collective beauty and interest of their surroundings. Flower containers were surprisingly inconspicuous and harmonious (I do not recollect seeing a single milk bottle). The spirit of adventure which is an essential factor of the well-balanced gardener, was evinced by the quantity of new material. Its strongly exotic flavor was especially noticeable to a northerner and brings home to us once more the realization of California's many different climates and growing conditions.

And the attending visitors. After all, the attitude of the crowd very largely expresses the effect of the flower show. On the faces that make up the attendance can be read the success or failure of the effort. At the San Diego flower show the people expressed every evidence of satisfaction. Pleasure radiated from their faces and their reluctance to leave was strikingly manifest. Moreover, pencils and notebooks were freely used, a fact which must have been gratifying to those who had taken pains to correctly affix the plant names. The whole affair took on the earnestness and horticultural alertness of an English Flower Show (though in that country the entrance fee of one shilling would be deemed all too low).

The true flower show exhilaration was there too, in full force. That lilting exuberance which greets one at the entrance, administering a winged feeling, a desire to sing, a joy in life. This too is one of the missions of the California flower show, even though we are not flower starved as is the easterner who attends the New York Grand Central flower show in March. LESTER ROWNTREE.

JUNE MEETING

The regular meeting of the San Diego Floral Association will be held in the Floral Building in Balboa Park on Tuesday evening, June 17th, at 7:30 o'clock. As this is the annual meeting the election of the Board of Directors for the coming year will be held and reports of the past year's activities will be read by the treasurer and by the secretary.

All members interested in the welfare of the Association are requested to be present.

FILES FOR SALE

A few complete files of the "California Garden" are available at a reasonable price. Address the secretary, P. O. Box 323, San Diego.

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FRITILLARIA, CHECKER LILY

By Fidella G. Woodcock

Natural History Museum

As the species of fritillary native to America are all found west of the Wahsatch or Uinta mountains in Utah, with a range northward through Wyoming to the Columbia River in Oregon, our eastern members will no doubt be interested to learn of these odd but attractive wild tulips from our side of the Pacific. Most of the species grow in Central Europe and Asia.

In the Kew Gardens description of the fritillary it is said that our *Fritillaria atropurpurea* most nearly resembles *Fritillaria kamtschaticensis*, of Ker Gawl, a botanist of the eighteenth and early part of the nineteenth century, John Bellenden Ker, known to his friends as Bellenden Ker, first editor of Edwards Botanical Register.

This is a livid wine-purple lily not checkered, one and one-quarter inches long, found in Siberia and Alaska, the type locality of the genus. Other species extend along the coast to California and even Southern California, but all that I have seen are the hardier types of the north, and our local species.

F. atropurpurea extends as far south as the San Bernardino mountains and like the cardinal flower, *Lobelia cardinalis*, blooms in our high altitudes at the same temperature as at sea level in Alaska. This, to my mind, is an important feature in scientific garden culture, for it enables one to understand its hardiness and the time of appearance with us in late winter. Some of our hardy wildlings bloom in winter seasons only and are scarcely known, as they appear when we are not in quest of flowers, without a thought that they are in size, shape, and color, products of varying conditions. One of these is *Nemophila atomaria* that comes with the first cold rains and disappears the rest of the year, unknown and unsought. It is a midget "Baby Blue Eyes" and under the glass very decorous in habit.

To return to the California fritillaries, ours at San Diego is *Fritillaria biflora* Lindl., called "Mission Bells". Being a stout little plant it rarely grows to more than 4 to 10 inches, sometimes a foot high, and has flowers that vary from dark brown to greenish purple. Singular enough the basal leaves that are quite large are borne in the year or years before the flowering stalk appears so that often when the species seems to be extinct, after several seasons it returns in full glory.

It is sometimes remarked that the Mission Bells on the mesas about San Diego are nearly extinct as they do not appear abundantly as in former years. This is in part true for by the tilling of the soil about Mission Valley its bulbs have become displaced. Sometimes under favorable situations they will return in

the vicinity. Like the Yucca, the Stonecrop and the Agan, the *Fritillaria* spreads at the root "Hen-and-chickens" like, or in the manner of the Rice-Root with many rice-grain bulblets.

In "Gardening in California" by Sydney B. Mitchell, the chapter "A Sequence of Bulbs" mentions "The sombre but interesting Mission Bells, *Fritillaria biflora* as enjoying full sun, but the brighter *F. recurva* and other woodland bulbs should be given partial shade."

The drooping or nodding flowers give these tulips a unique, charming effect among flowers for the genus is a true tulip and has varying local habits.

One of our leading botanists told me that the Mission Bell grew in a range of nine miles along the mesas bounding the north side of Mission Valley through which the San Diego river flows. For some years a half a dozen were the most that could be found. In the winter of 1929 they returned. As that was an exceptionally cool winter the reason was obvious. Mission Bell is but a local name. True to nature the little folks who love to pick them call them Chocolate Lilies and the name is very endearing to children because they know what it means.

Black Lily is quite appropriate, but *F. atropurpurea* is the well-known Black Lily of the gardener and one name for two species causes confusion. No doubt *F. biflora* is the lowland form of the mountain plant, in flood times distributed from the glacial plateaus.

In California, generally, the oak-covered brushy slopes produce, near the sea, the Rice-root Lily, *Fritillaria lanceolata*, Checker Lily, in which the lower portion of the bulbs is covered with numerous rice-grain bulblets. This is a taller plant having stems two or three feet high.

In the warm sands about the reservoirs at Seaside in the Pacific Improvement Company's lands near Hotel Del Monte, I have frequently taken my hand trowel and rustled the bulbs from the white dun sands, even when young rattlers were playing hide and seek in their chase for food. The rattlers are fond of live mice and swallow them whole. However, after such gorging they are torpid for two hours until their prey is swallowed, dissolving slowly. It takes that length of time alone for swallowing.

The Checker Lily unlike the Chocolate Lily that has bells in pairs at the end of the stems and short branches, has flowers in long racemes—dark purple, mottled with greenish yellow. The segments are deeply concave and in the hollow part have very large ovate glands. The nectaries. These are green and quite distinct, giving the bells a showy coloring especially when covered with fine black dots. But the markings do not always appear.

Two other species I have collected. One, *Fritillaria gracilis* is a small variety of *F. lancolata* that grows in the Marin Hills and along the slopes of the Coast Mountains north. The segments of the flower parts are pointed and the stamens are much smaller. Another, as Pescadero Beach, several miles south of Pacific Beach in grain fields near the sea, Pescadero is the Spanish word for place of fishes. The slow tides wash in many small fishes that die in stagnant pools and form an excellent fertilizer for the grain. In consequence when the soil is tilled, bulbs of fritillary are raked to the edges and grow around the field in large masses for acres. These are dull white in color and malodorous. If kept in a closed room overnight they are impossible. When I was collecting I usually set them in an enclosure of the backyard at night. They are interesting to study, though not so attractive being overfed by the rich soil of sea food. This species, *Fritillaria agrestis*, is commonly called Stink Bells on account of its disagreeable odor.

All of the fritillaries in our area have the nectaries at the base of each bell-shaped perianth-leaf, while the lily has the glands in the middle of the segments that are recurved, rolling backward at the tip. *Fritillaria pudica*, too, has recurved perianth parts in age. The flowers are brick red. I have had pressed specimens of this and of *F. liliacea*, White Fritillary, but have never had the fresh material.

The word fritillary means checkerboard, or dice-box. Why? Some are checkered and some are not.

Fritillaria imperialis is a very striking garden plant and in horticulture has showy purple-spotted stems, from a large bulb, many scattered leaves with flowers in bells hanging on curved pedicels under a crown or whorl of leaves. The leaves are often scattered, ascending the stem, partly protecting the bells, but more often the flowers stand apart at the top of the plant, one and a half to two inches long. Three-parted style. The name Crown Imperial characterizes the flower arrangement underneath a crown of leaves.

NEW MEMBERS AND SUBSCRIBERS

Mrs. W. S. Dorland, San Diego.
 Harold Dankworth, San Diego.
 San Diego Public Library, San Diego.
 R. J. Longden, Los Angeles.
 K. S. Stanford, South Africa.
 Mrs. Lillian Ayres, Encanto.
 Willo Barba, Sebastopol.

The very act of planting a seed in the earth has in it to me something beautiful. I always do it with a joy that is largely mixer with awe.—Celia Thaxter.

JAPANESE IRIS

By Mrs. E. J. Daley

These lovely flowers are the latest in the Iris season to come. Often not blooming until August. Though sometimes they will bloom early in June and again in August.

They require totally different treatment than any other Iris, except the swamp group, as they must have plenty of water at all times and loads of fertilizer. This can be done easily by banking up the sides of the bed a few inches and flooding it.

The foliage dies back in winter but in the spring after it is up six or eight inches, cover the entire bed to the depth of four inches with ordinary barnyard fertilizer. As the flower stems begin to grow give liquid fertilizer. I am told that a few choice dead fish planted around the roots will give surprising results, but as I live some distance from a supply have not tried that method yet.

I find it best to replant my beds every other year. They give better blooms. The flowers range in size from six to ten inches in diameter, a twelve-inch bloom is not uncommon. The standards and falls are of the same size and the crest is short, giving the flower a flat appearance. One clump or root will often have as many as four to six stems, all having from six to eight blooms. These stems are from three to five feet tall.

The flowers are in all shades of blue from the palest sky to deep purple. Some of the variegated ones are lovely. One of my favorites is a snow white with a bright yellow crest. Another beauty is a rosy pink hue somewhat like the German Iris Opera. The foliage is grassy, very much like our Ochroleuca.

The names are nearly all Japanese and for me, impossible to pronounce. If one has the time or patience to bother with seed, they are fully repaid though it is three years before the seedling will bloom. This iris will produce seed more easily than any I know of and they are easy to grow.

Most interesting results were had last year by planting a few clumps or devisons in my perennial bed. Quite a little shade was afforded and they seemed to like it and the blooms did not fade so quickly. Also after the flowering time the ugly dead foliage was covered with other things. The individual flowers were not so large because of less water and fertilizer, but the experiment was worth while, and I have noticed that the roots or clumps have multiplied as well as those in the regular bed.

LATH HOUSE MATTERS

By Alfred D. Robinson

I am a trifle nervous about writing my effusion this month because I have found out some people read what I write. Several visitors have come in the past two weeks and asked to see my pet rock and without exception they echo the plumber's verdict on my wall, which was, "She's a peach," but I am sure the rock is masculine—or perhaps very modern, but that could not be, for it is hoary with age. This interest in rock for lathhouse work seems to be so strong and widespread that I am going to take a chance of getting the "ha-ha" from real rock experts and talk a bit out of my ignorance, maybe, but surely from experience. I deem that there is a big difference in the use of rock in lathhouses and for outside rock gardens which might be expressed baldly by saying that in rock gardens the rock is the main guy, while in lathhouses it is subservient to the plants and can only be excused when adding a desirable feature for their benefit. It is commonly seen as the supporting wall for terraces or raised beds and in that service does nobly and there can be no objection to placing the individual pieces so that they show their best looking side.

I have used the term terrace thoughtfully because any mound howsoever shaped must, to be effective, be really a series of terraces, or soil and water cannot be applied or retained. Further, the soil surface in all of these terraces howsoever small must have a tendency to slope inwards. Even if great care is taken to follow this plan, the terraces will always tend to reverse and frequent renewal of the soil and perhaps rock on the terrace edges will be necessary to maintain this important conformation.

My plan, which I admit may not be any better if as good as yours, is to place the rock wall for the first terrace and then fill to that level, and repeat the process for each level. Supposing I have three levels, I don't want three walls duplicating each other, so I break up the second one with the larger rocks that are good looking specimens, placing each one where it shows to best advantage, always keeping in mind that each little shelf must slope inward. The art in arranging is to get a good wall and not have it look like a wall and yet avoid the appearance of a dump.

There will be places for a truly wall such as bordering a sitting place and, and then I think it should frankly be a wall.

Outside of its building feature our soft rocks have a cultural side, they absorb water like a sponge and create a humid atmosphere for a considerable time after watering and ferns and similar growths love to send their roots under them. Adiantums, perhaps I should have said maidenhairs, are peculiarly happy when they can hook up with a piece of soft rock, and in such a situation will stand several hours of full sunshine. Yes, of course this rock is soft and now and then a piece breaks up and others tend to crumble but I have no remedy for that except to put in another piece. If the rock were hard it would not absorb water and instead of being cool would be hot. Besides some of those moss covered surface specimens have laid out in the brush for maybe a thousand years, so why should we worry about what ten or so will do to them.

Now about expense which we all have listed at the top of every schedule whether we have to or not. These rocks cost money, I know it, but after placing tons and tons of them I feel that the truckman is very inadequately compensated. My spine quivers and sags at the thought of lifting those thousands of pounds up and down in such big chunks. Further, I do not place the rock in a garden in the expense account any more than the cement foundation to the house. It is an investment that will still be there when we are gone and our children are put to it to get it out of the way to clear the road for their kind of gardening.

We have had the Mikado over the air a good deal lately so it is no wonder that "making the punishment fit the crime" should be in one's mind. I have always had a thought that way when the seed and plant catalogues, disguised now as Garden Guides, come around and the "How to do it" was exemplified this very day. I mean that the gardener does not exist who has not been fooled by some one or more of these beautiful works of fiction and has had to grin and bear it. This is the crime, now here is the way of the punishment as applied to me. A customer said, "I

want one of those bedding Begonias that is the nearest approach to the orange in the family and very luminous in the sun and of unimpeachable habit." I started to say, "Lady, you said a mouthful," and then something familiar in the phrasing struck me and I realized I was listening to my own words from my own modest little Lathhouse guide, and I choked and dug up the best I could to fit the description. I shall in future weigh carefully not only every word but every letter in future editions.

I may be wrong, but it seems I have had more than my share of embarrassing questions this last week or so, for every visitor has picked on a plant that is just passing from the scene as a peculiar subject for enthusiasm and I am weary with saying, "You don't want that now, plant seed this fall." I don't remember that the little *Calceolaria Mexicana* ever before excited such a fever of desire in young and old and yet it has bloomed in my lathhouse for years, in paths, beds, pots, baskets, in fact I doubt if a shovelful of dirt could be taken from anywhere that would not sprout this plant in the fall. It is a charming bit of bright yellow that naturalises very easily. Another thing desired of all peoples and languages is *FUCHSIAS* and in less than a year that gardening obsession will be on. They are especially fine this season, but why I don't pretend to say. The enthusiasm will probably abate some when the weather gets hot and dry and the thrips hold bridge parties all over the fuchsias I use bridge to illustrate the continuous performance.

May did run true to form except it rained and hailed as well as fogged and up to this writing, the end of the third week, has been appreciably colder than the same period last year. The rain and hail did no damage in the lathhouse except to the Fancy Leaved Caladiums and if I had had any sense they would still have been under glass. Perhaps this was a sending from the Gods of the Chamber of Commerce for I bought those Caladiums a long way from home, but I grew them with a soil from Cuyamaca mixed with gravel from Mission Valley and water from Lake Hodges.

I ought to talk to you about watering again but I am going to let you alone for this month in the hopes you will do it anyhow.

The Arbutus, or strawberry tree, is one of the rare instances wherein buds, blossoms and fruit are to be found on a shrub at the same time. In Spain and Italy its strawberry-like fruit is sold in the markets. There is a story that tells about serpents which ceased to be venomous after eating this fruit. It is symbolic of "inseparable love."—C. D. B.

FUCHSIAS

The miniature or baby fuchsia family has many very dainty specimens. The common type familiar to all of us—the Graciles, London, etc., with the slender little blooms of blue and red are the most sturdy and tall. Another one with a bloom a little larger, has foliage of a distinct red on all new growth which gradually turns to a green but almost variegated. Then there is a beautiful one, Josephine Frankenfeld, growing more bushy and compact which has wonderful little pink and white blooms. One of similar growth has a little larger blossom, coming out a lavender-blue, and then turning to a pinkish lavender. A trailing one is called Prostrata, having rather small blue and red blossoms. The tiny little *Mimosa* has the distinction of being the smallest; blossoms are only about one-quarter inch in length, blossoms two shades of red.

MRS. W. S. THOMAS.

TELEGRAPH PLANT

Leaves of this plant, which grows in India, are divided into three parts, each of which moves continuously. The two external leaflets are small and travel up and down in distinct jerks, the big leaflets moving only slightly. During the entire life of the plant this motion continues.

Quite an athlete is the evening primrose. When this plant dries up, the wind soon loosens it from the ground. Sometimes its branches break in such a way that regular crutches are formed, and upon these the plant hops and limps over the prairies. It sows its seed during this hopping expedition.—C. D. B.

SAN DIEGO WEATHER DURING JUNE

By Dean Blake

The dry season begins in June, and stormy, windy weather is unknown. Rainfall is negligible, and there has never been a day in the city with more than a quarter of an inch. Many Junes have passed without a drop of precipitation.

Hot weather in the interior becomes the rule, and this contributes to night and morning cloudiness near the ocean, which now becomes an every-day occurrence. However, in the mountain regions, day after day passes with mild, cloudless weather.

Due to the cloudiness, temperature ranges are small along the littoral districts, and there is little change from day to day. Minima below 50 degrees never occur, and maxima over 90 degrees have been recorded but a few times.

GARDEN PROBLEMS

By Walter S. Merrill

During the next four months it is probable that more people in the United States—and certainly more people in California—will travel than have ever travelled before. Until the advent of the automobile, Americans were decidedly stay-at-homes; but the last decade has seen a tremendous change. Everyone—rich and poor, old and young, serious and frivolous—is irresistably inspired to go somewhere. This inspiration may lead only to the most humdrum of trips, or it may send us on journeys filled with adventure and fascinating new sights and people. If the journey gives new experiences, inspires new ideals, and brings us home filled with pleasant memories and with newly enriched visions of the future, it has not been unsuccessful, whatever its discomforts may have been.

No one, I think, gets more enjoyment or more lasting good from travel than does the true gardener. You may think that the garden lover is content within the confine of his walls and hedges. And so he is—but what great fun it is for him to go out into new country and see the gardens and the people and, above all if he be a true lover of garden beauty, the glory of Nature's great landscape gardens. "Ain't Nature grand!"—and ain't Nature a wonderful gardener!

Presumably I am addressing now only garden enthusiasts, and I wish to write a few paragraphs of advice to such of them as are planning vacation motor trips. It doesn't matter so much where you go—maybe a long journey to Vancouver, to the Grand Canyon, to the High Sierras or even across the continent; or perhaps only week-end trips to our neighboring mountains and beaches. Some trips are richer in experience than others, it is true; but what counts is the advantage taken of the proffered opportunities. A day's ride to Julian or Palomar or Riverside will furnish enough material for garden planning to last a long time. And a month's journey will offer little to the unseeing eye.

First and most important is my advice to travel as slowly and as observantly as possible. Make time over the less interesting stretches of road, but slow down at indications of beauty, whether natural or man-made. Mileage should count but little in your plans. An hour spent in a lovely garden or in a glen filled with rocks and wild flowers will long be remembered, while a fifty-mile burst of speed over a concrete highway is but the

joy of the hour. Make a speed that permits the driver to see something of the passing beauty.

Second, do not be afraid to stop the car at intersecting points, and to get out and browse about a while. Note the groupings of rocks and trees and shrubs. The composition of the natural landscape (especially in details) is often finer than anything you can find in parks or gardens. Ponder upon such effects as appeal to you especially, analyze them, and consider how they might be used at home on a reduced scale. Watch especially the rock formations and arrangements and the relative proportions of slopes and gullies. Note any remarkably fine groupings or flowering plants—notable for either color combination or proportion. Such study will, inevitably, result in an improvement in your home. And if you come upon an especially attractive garden, do not hesitate to stop and ask the owner for permission to visit it. He will certainly feel honored and delighted to show you his chief treasures. Discuss with him the purpose of his design and his methods of culture. Tell him a little (but not too much) of your own garden, invite him to visit it, and it is quite possible that a garden friendship will be established. At any rate, rest assured that no garden owner will be offended when you state your admiration for his work and your desire to become more intimately acquainted with it. Such an informal visit pleases the owner and helps you.

Third, I advise you to take pictures and make notes. I realize fully that a deliberate plan to do so usually results in little of value. It is like keeping a diary from a sense of duty. But cultivate the habit of making intelligent notes of what seems of possible future value to you in your gardening, and of taking pictures especially worth remembering. At the moment you can visualize a lovely bit of ground as transferred to your garden; but after a week of successive lovely bits of ground, you cannot expect to carry home more than a very hazy idea of any one of them, unless you have notes and pictures sufficiently clear to recall the essential details.

Make acquaintances and talk garden to them. It is surprising how large a proportion of the people that you meet are interested in the subject. And it does not take two minutes of conversation to learn whether a

man is garden-conscious or not. Many lasting friendships are based on a mutual interest in horticulture, and the only way to establish such relations is by experimenting with the people you meet. Do not be stand-offish and remember that the man in the broken down flivver probably knows far more about gardening than does he who rides in a Rolls-Royce—although even that is very far from certain. You never can tell—and therein lies the charm of the adventure.

After all, it is not the amount of scenery that you view, or the number of elegant gardens that you pass by, or the number of people that you meet, that makes a journey worthwhile. It is, rather, the careful discrimination with which you see, study and enjoy them.

REPORT OF THE MAY MEETING

On Tuesday, May 20th at 8:00 P. M., the regular monthly meeting of the San Diego Floral Association was called to order by the President, Mrs. Mary A. Greer, who briefly outlined the high lights of the recent spring flower show. Following her introductory remarks some ten minutes were devoted to the identification of garden pests now prevalent and control measures were suggested. R. R. McLean, County Agricultural Commissioner, being absent from the city, arranged for one of his inspectors to give the talk. At the close of the meeting printed insecticide formulas were distributed.

The principal speakers of the evening, Richard S. Requa and Milton P. Sessions, cooperated in presenting a word and camera picture of the "Chamber of Commerce Goodwill Excursion to Mexico City." The large audience in attendance were first given a nurseryman's and landscaper's impressions by Mr. Sessions. He deplored the aversion of many San Diegans to vine-covered dwellings, stating many desirable landscape effects could only be obtained with the use of vines. In Mexico he said, many uses were found for them and their gardens were made beautiful by their use. Mr. Sessions told of his enthusiastic admiration of flamboyant bougainvilles in all shades of magenta and red spilling over garden walls in riotous abandon. Since it is generally believed that red and magenta bougainvilles harmonize to about the same degree as two alley cats yowling on the back yard fence at midnight, it was not surprising that there were numerous gasps of incredulity from the audience. Before you mentally suspect Mr. Sessions of being under the mellowing influence of the Mexican atmosphere, remember that the blending of many shades and colors often harmonize two colors that individually are not compatible. Mr. Sessions made a few comments during the

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showing of the picture, once drawing attention to some fine potted crotons, later identifying a large vine as *Bignonia Venusta*, the orange-flowered bignonia.

Mr. Requa followed Mr. Sessions with a presentation of motion pictures taken on the trip and kept the audience well entertained with his timely observations. He spoke of the genuine love of the Mexican for living plants and showed on the screen humble peon cottages arrayed with vines and plants. The many patio gardens shown all unmistakably indicated that they were built to live in, not merely to look at. Water pools were much in evidence, generally built of decorative tile. Exceedingly tropical in effect were the many palms. Some scenes of coconut palm groves were shown, with a small boy dexterously scrambling up the trunk of one tree to gather fresh coconuts for the party.

We were shown the historical floating gardens of Tenochtilan, the ancient Aztec city, from the ruins of which has sprung Mexico City. These floating islands in the day of the great Aztec emperor, Montezuma, furnished Tenochtilan, then a city with a population of three hundred thousand with most of its vegetables and flowers. Prescott in his "Conquest of Mexico" states these islands were two or

three hundred feet in length and three or four feet deep. A natural archipelago existed at that time in Tezcuican lake formed by the loosening and detachment from the shores of masses of earth held together by the fibrous roots with which they were penetrated. The Aztecs in their poverty of land turned their observations of this natural phenomena to good account and wove rafts of reeds, rushes and other fibrous materials sufficiently close knit to hold the sediment that was brought up from the bottom of the lake. Most of these islands at the present time have become anchored by roots but are still used to produce vegetables and flowers. On the canals separating these islands, gondola-like crafts were shown laden with fruits, flowers, vegetables and in fact, tradesmen of all sorts of wares, while excursionists skimmed along in leisurely fashion on a day's outing.

The showing of the pictures took over an hour and the audience was uniquely informed of their end by a camera shot of the Santa Fe depot coming rapidly in view from the train. Excellent refreshments were served immediately following, provided by the house committee.

CORALINE B. TUTTLE.

WHAT IS THE MONKEY PUZZLE TREE?

By Fidella G. Woodcock

The broad-leaf pines belong to a group of 12 species of cone-bearing trees found mostly south of the Equator. Of these Araucaria excelsa, the Norfolk Island Pine, as a tree and as a pot plant is considered the most beautiful product of the plant world. Because of its circling whorls of branches it is commonly called "Star Pine." The juvenile stage of most of the Araucarias is much prized for decorative purposes in cold climates and for lawn trees in the near tropical states. A. excelsa is native of the coast of Chile and South Sea islands of the same latitude. It is abundant on Norfolk Island between Chile and Australia.

Both Araucaria excelsa and Araucaria Bidwillii are more tender cone-bearing broad-leaf pines. The latter has luxuriant foliage and is very thrifty in San Diego. The cones are large and handsome but have no food value for monkeys.

From Arauco, a province of Southern Chile, comes the most hardy of the broad-leaf types. It is called Araucaria araucana, the Monkey Puzzle Tree, and its cones have fossil forms in the jasper mines of the mountains of Southern Brazil to Patagonia and Chile, an excellent rock garden subject.

The Riggs Expedition from the Field Columbian Museum of Chicago in 1925 excavated fossil cones from the snows of Patagonia that show that what we now call Araucarias are descendants of an order of Arau-

carites of ancient origin that are found in North Carolina and Newfoundland and are similar to the fossil Williamsonia of Kansas.

Araucaria araucana is known in California as Araucaria imbricata of California, a garden tree of the bay cities north. It has features of foliage different from the others. Not only the branches but the whole trunk is clothed with sharp-pointed overlapping scales that fit like a coat of mail, so smooth that the monkeys in search of nuts for food suffer many smarts and bruises in climbing among its close-set foliage hard to master. So it gets the name of "Monkey Puzzle Tree" on its dry mountain slopes of the West Andes. Being a high altitude tree, it grows well and tall farther north, but never attains much form or height near the tropics. Among the Berkeley Hills it may be seen as a freer but never a luxuriant tree in gardens.

It is possible that Araucaria Bidwillii with its stiff leaves might be well-named the Australian Monkey Puzzle. As I am not trying to establish a precedent, it is safer to observe the present rules of nomenclature. People may call them by reasonable names even if untechnical.

One most common species of "Star Pine" in Southern California is Araucaria Rulei, very similar to Araucaria excelsa, and sold for it in nurseries. Among those in cultivation generally the Brazilian Araucaria is in every way elegant. Its foliage is blue green and like the Australian species the cones are large and handsome.

There are many features of these pines that are very much in place in these times of exploration and investigation and more can be said farther on. Less known are A. cunninghamii and A. cookii, sometimes seen in San Diego. They are from the islands and desirable near the sea. Miss Sessions has introduced them to Pacific Beach.

FINANCIAL STATEMENT OF SPRING FLOWER SHOW

Gate Receipts	\$597.30
Labor	\$45.40
Trophies	78.30
Advertising	24.50
Premium Lists	8.57
Window Cards	5.15
Publicity	20.00
Park Board	65.00
Clerk's Supplies	1.10
Mailing tubes	4.00
Postage	1.90
Laundry	5.84
Certificates	30.18
 Total Expenditures	 289.94
 Net Receipts	 \$307.36

**RANCHO SANTA FE GARDEN CLUB
EXHIBIT**

By Ruth R. Nelson

The fourth annual Rancho Santa Fe spring flower show held on May 24 and 25 was attended by the most enthusiastic crowd of visitors which has ever thronged the rancho at such an event. All of the new features which had been planned for this year, the landscaping exhibits, the fruit displays and the Chinese jug which furnished refreshing fruitade for many hundred people, the tours, the elaborate flower displays together with Dr. A. R. Sprague's splendid gladiolus each found ample appreciation.

Judges for the competitive classes were John A. Armstrong of Ontario, Thomas McLoughlin of Encinitas, and Walter S. Merrill of San Diego. The list of awards follows:

Best display from a private garden: First, Mrs. Ellis Bishop; Second, Mrs. Barton Millard. Best rose in the show: Mrs. Ellis Bishop. Best collection of roses, 10 varieties and not more than 3 blooms of each variety: First, R. E. Morgan; Second, Mrs. T. L. Carothers. Best collection of roses, not more than one bloom of a kind: First, Morgan; Second, Carothers. Best three white roses, one variety: Mrs. Rose Kerr. Best three red roses, one variety: First, Mrs. Ziesmer; Second, Mrs. John Cushman. Best three yellow roses, one variety: First, John White, Jr.; Second, John White, Jr. Best three pink roses, one variety: First, John White; Second, Mrs. Ziesmer. Best three single roses, one variety: Mrs. T. L. Carothers. Best three flame-colored roses, one variety: Mrs. Ziesmer. Best general display of roses: First, Mrs. T. L. Carothers; Second, John White. Best display of gladiolus: First, John White; Second, Mrs. Ellis Bishop; special, Mrs. H. L. Carpenter. Best display of Iris: Miss Eliza Shaffer. Best display of Snapdragons: Porter. Best display of Pansies: First, Miss Mildred Pease; Second, Mrs. Ellis Bishop. Best display annual flowers: First, Mrs. C. F. Pease, larkspur; Second, Mrs. James Smillie. Best arranged basket of flowers: Mrs. Harold Ketchum; Second, Mrs. H. L. Porter; Specials, Mrs. C. F. Pease and Mrs. T. L. Carothers. Best display of stocks: Mrs. C. F. Pease. Best display of bulb flowers other than gladiolus: Mrs. Ross Kerr. Best display of Geraniums: First, Mrs. S. R. Nelson; Second, Mrs. Ellis Bishop. Best display Pelargoniums: First, Mrs. C. E. Ellis; Second, Mrs. T. L. Carothers.

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Best display cut flowers not otherwise specified: First, Mrs. Ellis Bishop; Second, Mrs. C. H. Bristol.

Best display cut flowers arranged in vase or bowl: First, Mrs. Barton Millard; Second, Mrs. Gilloon; special, Mrs. H. L. Porter.

Best collection succulents and cacti: First, Edward S. White; Second, S. H. Bingham.

Best potted plant: First, John White, Jr.; Second, Mrs. Ellis Bishop; special, Mrs. C. F. Pease.

Best collection ferns, begonias and other lath house subjects: John White, Jr.

Best arranged basket of wildflowers: First, Faye Thomas; Second, Mrs. S. R. Nelson; special, Mrs. T. L. Carothers.

Best children's collection of wildflowers: First, Alletha Morgan; Second, Margaret Whitsitt.

Best arrangement of wild flowers in vase, bowl or basket: First, Betty Ketchum; Second, Barbara Ketchum; special, Hershel Lerrick, fourth grade.

Special awards were given to the following exhibits:

Alletha Morgan: Clay model of house with landscaped grounds prepared for the school exhibit at the County Fair.

Mrs. S. R. Nelson, Display of exhibits taken from the old historic Osuna garden.

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Mrs. Barton Millard, Canterbury bells in silver vase.
 Mrs. Ralph Clagget, red cereus in blossom.
 Russell Millar, white cereus in blossom.
 Irrigation District Office garden, display of annuals.
 John White, Jr., collection of blossoming potted petunias.
 Fruit and vegetable display: Mr. Ellis Bishop, first; Douglas Fairbanks, second.
 Avocado display, William Bechberger.
 Young berries, George Megrew.
 Strawberries Mrs. Glenn A. Moore.

CLIMATE TO ORDER

By Major Geo. B. Bowers

Torrey Pines.—Five wire-screen houses are nearing completion at the Acclimatization Station of the United States Bureau of Plant Industry at this place. They are an experiment here, but at Bard they have demonstrated their usefulness, it is said, plants inside the houses having escaped damage by frost while those outside were greatly injured. Similarly constructed houses are reported to have been successful in Florida and other states. It is not yet known how useful they will be along the coast of Southern California.

The frames of the structures are so set as to obstruct the sun's rays as little as possible, that is, their supports point north and south and the narrow edges of the uprights are set with like consideration, thereby giving the interior the full benefit of the winter sun.

The frame is covered with wire screen of one-sixteenth inch mesh. This screen obstructs the sunlight but little and is an effective windbreak. But, in addition, there is the added and more important benefit of frost protection. This phase is still a subject of experiment, but it seems safe to predict that the proven benefits of the Bard experiment will be repeated here.

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FUCHSIAS

By K. O. Sessions

The Fuchsia Society of the California Coast has its headquarters at Oakland, California, and its president, Mr. Wm. S. Ewing, who is Superintendent of the Public Schools of that city, was lately in San Diego attending the teacher's convention. He was very enthusiastic about the work that the Society can accomplish not only in getting the names of the varieties straightened out but in the increase of desirable varieties. San Francisco has long been famous for her fuchsias—but San Diego can be proud of the success attained here when a partially shaded location is selected and a regular fall pruning is attended to. A well-grown fuchsia is a beautiful plant both in grace and flower but a neglected plant is a real eye sore—without shape and untrainable.

A fuchsia's growth must be directed while the growth is soft and tender for when the branch becomes matured and hard it is unbendable and very brittle. Each plant should have a good stake either 3, 5 or 8 feet long, depending on the height that you wish the plant to attain. A straight and central main stem with side branches on either side with not too long a growth makes a symmetrical plant and the side branches can all be cut back to within two to four inches of that central stem or backbone in the fall.

If you want a rounded or bushy plant then the central stem must be nipped back and all the side branches nipped back or headed in quite severely so you will develop a rounded or ball-like plant. This nipping back of the end of all the branches makes the plant grow into a ball-like shrub. The smaller growing varieties are best for this sort of training.

The half tender ends are the best slips to grow—in clean coarse sand and semi-shade—as beneath a bush. The hard wooded slips grow fairly well in the winter season.

Standard or tree-like plants should be popular on the north exposure, and as many a good home faces north they will make a choice formal plant for such a place. The plant must be kept growing perfectly straight to the desired height and then the top nipped off and branches will form which must be headed in frequently—first when 6 to 8 inches long in order to form the round and compact head of the desired size.

This fall's flower show should encourage the growing of fuchsias in pots and in full bloom for cut fuchsias are quite a failure for a display.

Fuchsias will stand considerable wind, will grow well near the sea and are in flower for a very long period. They are a very decorative plant for the garden and are useless as a cut flower.

There are probably 25 to 30 varieties to be found in San Diego to-wit: Black Prince, Phe-

nomenal, Rose Phenomenal, Arabella (3 varieties), Minima, Gracilis, Triphylla, Salmon Queen, Monarch, Jupiter, Diamant, Storm King and 2 small white-centered, Orchid and 3 lavender, some of these are conveniently named.

Mr. Ewing found a few varieties to take home from San Diego. The single pink and white variety called Arabella was a favorite and he took one home with him. Also the brilliant Triphylla that is such a successful bloomer. Triphylla has a habit of sending out root suckers that often spread 18 inches away from the base of the plant.

STRAY THIUGHTS

By P. D. Barnhart

In May issue of The Garden an article appears under the head "New Plants" which attracted my attention and that for two reasons. First, the Generic name of the first one is not spelled correctly. It should be Chimaphila. Second, if Mrs. Thomas is correct in the description of the color, it is an unknown species to either Jepson or to Gray. I have met with this beautiful member of the Eriaceae, or as the tribe is popularly known the Heath family.

It is abundant in the wild woods of the Atlantic coast north of New York, and is found in the forests of Alaska, but in every case it was of the purest white, and what a beauty it is. But beloved, if any resident of this Southland is tempted to try it my advice is "forget it," unless it would be at an elevation of 6,000 or more feet, and then in the shade of trees. Here is a list of plants this writer has tried out to his own satisfaction that they are misfits in our garden: Blood Root (*Sanguinaria canadensis*), Blue Bells (*Mertensia virginica*), all of the Cypripediums native of the Atlantic coast. The common name of these flowers is Lady's Slipper and Moccasin-Flower, Jap Iris, Oriental Poppies, *Papaver orientalis*, Early Flowering Tulips.

For new plants, not exactly new, but rarely seen in our gardens, here are a few: The wonderful *Cymbidium chloranthum* A Dutchman's Pipe vine; botanically *Aristolochia elegans*, which is charming when in flower and easily grown in full sun. Armacost and Royston of Sawtell have both subjects. *Mahernia odorata*, a procumbent shrub with finely divided foliage, and delightfully fragrant flowers. *Isemene calithinum* (Peruvian Daffodil). *Gardenia Thunbergia*, an evergreen from South Africa. The flowers are of the purest white, single, four or more inches diameter. Howard & Smith have the Daffodils, but who has a plant of *Gardenia* may be hard to find. We know of two speci-

mens, large and fine, but of no small plants. *Calodendron capensis* is a magnificent subject. Evergreen, and when given a chance to develop a top grows symmetrically. I guess I had better stop right now, and let the idea filter into the heads of Gardeners who are readers of this journal and have a home garden.

ROLLED-UP LEAVES

Leaves of plants which only receive scanty water supply are often protected from too rapid loss of it by being rolled up, causing slow evaporation. Sometimes the curled condition is temporary and again permanent. Indian corn leaf rolls up during dry weather and unfurls again with moisture present.

An expert botanist can readily tell by looking at the leaf of an unfamiliar plant whether it is a desert, seaside or alpine species. Disposition of water taken into the plant allows this.

Many plants, especially cabbages, meadow rue and nasturtiums, have a waxy coating which increases power of leaf to retain moisture, and prevents dew or rain from covering surfaces, and retarding "breathing."—C. B. D.

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